Phoenix Wildlife Summit

October 16, 2004

Demographics and Interest Areas

6 Participants

- Barbara Hawkins, Town of Wickenburg
- Tom Hulen, Desert Foothills Land Trust
- Eric Larsen, Desert Flycasters (DFC)
- Sam Campana, Audubon Arizona
- Dan Scheske, Arizona ATV Riders
- Ray Chavez, Town of Superior

The participants were asked to indicate which stakeholder group they were representing during the summit and identify their personal interests.

Demographic results indicate the group was fairly homogenous with a few exceptions.

- Even split of government representatives (2), environmentalists (2) and sportsmen (2) (Figure P-1.)
- All (6) hunt and/or fish (Figure P-2.)
- All (6) watch wildlife and/or participate in animal welfare activities (Figure P-3.)
- Half (3) use off-highway vehicles and/or watercraft. (Figure P-4.)
- Most (5) garden and/or watch wildlife at their home (Figure P-5.)

Figure P-1: Participant Representation

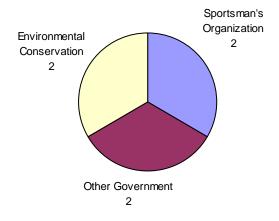


Figure P-2: Hunting and Fishing

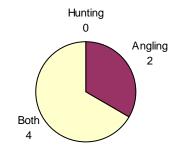


Figure P-3: Wildlife

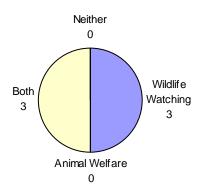


Figure P-4: Recreation

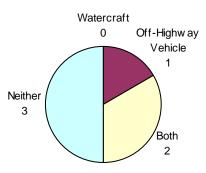
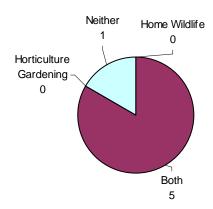


Figure P-5: Home Activities



Part 1: Arizona Game and Fish's 12 Challenges

During recent strategic planning efforts, the Arizona Game and Fish Department (AZGFD) staff identified 12 challenge areas. Summit participants were asked to review the list and determine "Which one of these challenges is the most important in achieving the AZGFD's mission."

Agency Mission: To conserve, enhance, and restore Arizona's diverse wildlife resources and habitats through aggressive protection and management programs, and to provide wildlife resources and safe watercraft and off-highway vehicle recreation for the enjoyment, appreciation, and use by present and future generations.

The following is a description of each of the 12 challenges used during the Summit. The capital word in parentheses is the keyword used to identify the challenge on the CoNexus® graphs.

- **Planning and Funding** Manage wildlife resources as a public trust through efficient and funded activities. (PLAN)
- **Biological Information** Ensure that biological information used in decision making is accurate and used to implement multi-use land management. (BIO INFO)
- Wildlife Management Make wildlife decisions that reflect sound science and values. (MANAGE)
- Wildlife Habitat Work to ensure habitat is protected and properly managed for wildlife. (HABITAT)
- Partnerships Develop partnerships that recognize wildlife as a public trust. (PARTNER)

- Laws and Legal Considerations Ensure laws and policies are sufficient to protect wildlife and their habitats. (LEGAL)
- **Law Enforcement** Enforce laws to protect wildlife, public health and safety and sustain recreation opportunities. (ENFORCE)
- **Wildlife Recreation** Provide ample wildlife recreation opportunities for the full spectrum of wildlife recreation users. (RECREAT)
- **Information and Education** Provide the public wildlife information and education. (EDUCATION)
- Off-Highway Vehicle Management Manage off-highway vehicles impacts on wildlife and their habitats. (OHV)
- Watercraft Management Manage watercraft impacts on wildlife and their habitats. (WATERCRAFT)
- Administrative Challenges Maintain effective agency through sound fiscal management, business practices and well-trained workforce. (ADMIN)

A dual-paired comparison was used to determine which challenges were the most important to the Summit participants. Participants were also asked to rate how well the AZGFD was performing today in each of the challenge areas.

The group agreed that working to ensure that habitats are protected and properly managed for wildlife was the most important challenge for the Department.

Importance

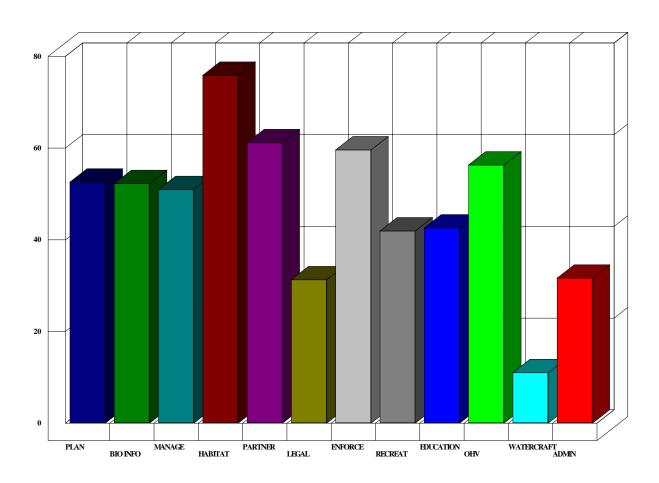
The participants ranked the importance of the 12 challenges as follows:

- 1. Wildlife Habitat
- 2. Partnerships
- 3. Law Enforcement
- 4. Off-Highway Vehicle Management
- 5. Planning and Funding
- 6. Biological Information

- 7. Wildlife Management
- 8. Information and Education
- 9. Wildlife Recreation
- 10. Administrative Challenges
- 11. Laws and Legal Considerations
- 12. Watercraft Management

Figure P-6 shows the difference in how much more important each challenge was to the group. There were significant differences in the most important wildlife habitat (value=75.9) and the least important watercraft management (value=11.)

Figure P-6: 12 Challenges by Importance



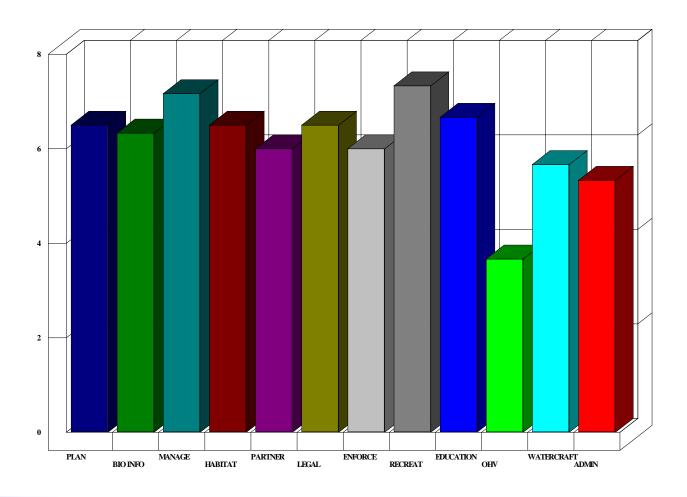
Performance

Participants also were asked to rate the current performance of the AZGFD in fulfilling each of the challenges today. A scale of 1-9 was used (9=practically perfect; 5=just getting by; 1=not at all.) All but one of the 12 challenges were rated 5 or higher. Off-highway vehicle management was the lowest in performance with a value of 33.3. According to the participants, AZGFD is performing the best on the following 3 challenges.

- 1. Wildlife Recreation
- 2. Wildlife Management
- 3. Information and Education

Figure P-7 shows how the participants rated the performance on each of the 12 challenges.

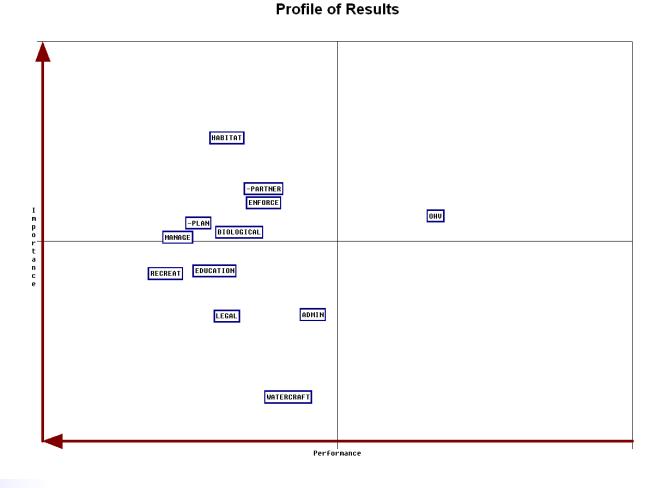
Figure P-7: Current Performance by Challenge



Profile Interpretation

The CoNexus® software creates a profile showing the relationship between the importance rankings and performance ratings. Figure P-8 shows the importance from top to bottom; the higher the challenge on the profile the more important it was to the participants. Performance is measured from right to left; the further left the challenge is on the profile the better the Department is performing.

Figure P-8: Comparison of Importance and Performance



Group Discussion

Off Highway Vehicle Management:

- It is a way for people to get out and recreate without hiking.
- Off-highway vehicle management didn't rank very high with this group. That may be because some of us believe that is part of habitat management.
- Off-highway vehicle management is probably a matter of education and enforcement. Anybody who has been in the outdoors has seen a couple of kids tearing down the road in an OHV at 45 or 50 miles an hour.
- If you use our waterways, you have to get a registration. That is not the same with off-highway vehicles.

Funding

Each participant was given ten gold coins representing \$100. At the back of the room were 12 folders – one for each challenge. The participants were asked to spend their money as they felt appropriate. They were instructed to spend all of their money and not to break any of the coins.

Figure P-9 shows that the participants spent 19% of their money on the most important challenge wildlife habitat (as shown on Figure P-6.) The next highest funded challenge (16%) was partnerships which was second in importance.

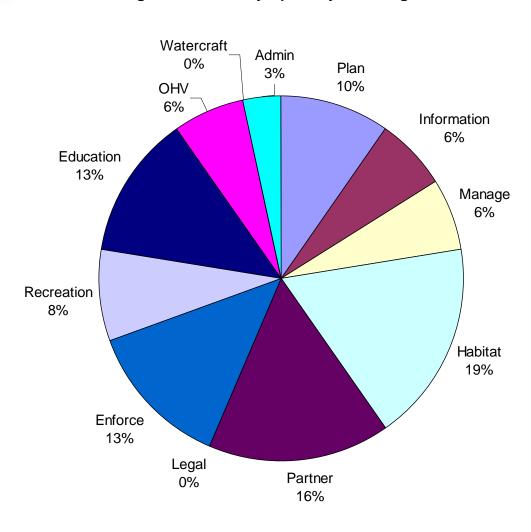


Figure P-9: Money Spent by Challenge

Part 2:

Stressors (Threats) to Arizona's Natural Habitats and Wildlife

Stressors Identified by Individuals

Each participant was asked to identify three stressors (threats) to Arizona's natural habitats and wildlife that they felt were the most important to be addressed in the next ten years. This brainstorming activity resulted in the following list of stressors:

- Funding
- Lack of funding
- Pollution
- Resource mining
- Abuse to land/wildlife
- Land use
- Poor wildlife management
- Population growth

- Growth number
- More users
- Water use
- Urban development; suburban sprawl
- People
- Development
- Drought
- Drought

Stressors Identified by Groups

The participants were asked to review their individual list of stressors and come to a group consensus on the top stressors. The following were the stressors identified by the group:

- Contamination and invasion of species and habitats
- Land use and wildlife conflicts
- Loss of habitat due to development and growing population
- Loss of habitat due to natural causes; i.e., drought
- Lack of funding priority
- Lack of public priority for wildlife

Stressors which are the most important for AZGFD to address in the next 10 years:

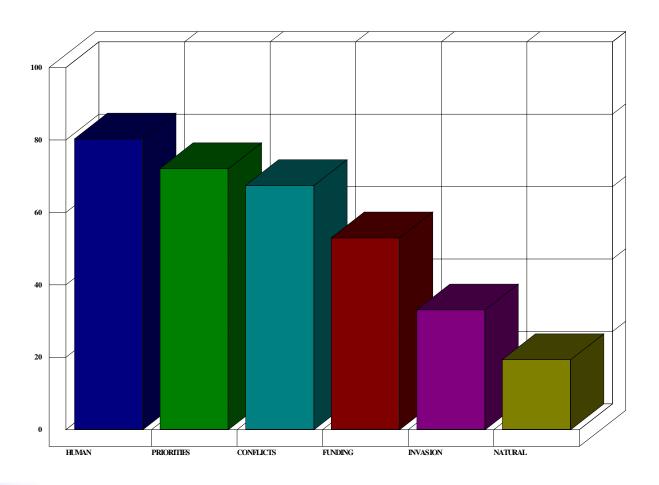
The participants defined, discussed, and combined their stressors into the following list which was voted using the CoNexus® dual-paired comparison software. The capital word in parentheses is the keyword used to identify the challenge on the CoNexus® graphs:

- Natural Causes Loss of habitat due to drought (NATURAL)
- Human Causes Loss of habitat due to development and growing population (HUMAN)
- Conflicts Land use and wildlife conflicts (CONFLICTS)

- Lack of wildlife funding (FUNDING)
- Lack of public priority for wildlife (PRIORITIES)
- Contamination and invasion of species and habitat pollution (INVASION)

The stress placed on habitats and wildlife by human causes, lack of public priority and land use and wildlife conflicts were ranked by the participants as the most important threats to be addressed in the next 10 years. Although the group spent a lot of time discussing the natural causes stressors, they ranked it last in importance. The participants stated they ranked natural causes threats less important because of the inability to address this issue in the next ten years.

Figure P-10: Most Important Stressors



Group Discussion

- You can't control the drought, but you can manage around it.
- The drought causes many problems loss of the watershed, declining wetlands, the fire hazard, and stress on the natural habitat.
- If funding is a problem, maybe we should look at some sort of impact fees. A lot of communities have done that for residential development. That takes care of police and fire protection, streets and the like. We don't have anything like that for habitat protection.
- When you have any kind of development or land-use planning, wildlife should be a priority. If you're going to develop land, you have to show that you have a 100-year water supply, but you don't have to show any impact on wildlife.

Part 3: Criteria for Identifying "Wildlife of Greatest Conservation Need"

Criteria Identified by Individuals

Each participant was asked to identify three factors that should be used by AZGFD to select the "Wildlife of Greatest Conservation Need." This brainstorming activity resulted in the following list of criteria:

- Revenue potential licensing
- Keystone species within community
- Herbivores and predators (elk, deer, antelope, etc. Not livestock)
- Species that are indicators to healthy ecosystem or community
- Aquatic game and non-game
- Research numbers
- Management difficulty

- Resilience
- Funding available for research?
- Threatened or endangered status
- Based on legal constraints and opportunities
- Laws & regulations
- Legal ramifications
- Heritage species

Criteria Identified by the Group

The participants were asked to review their individual list of criteria and come to a consensus of the top criteria. The following were the criteria identified by the group:

- Environmental impact
- Species providing significant economic value
- Species providing vital functions with ecosystems
- Indicator species (bio-community health)
- Impact on ecosystem
- Avian (Birds: predatory, migratory, and resident)



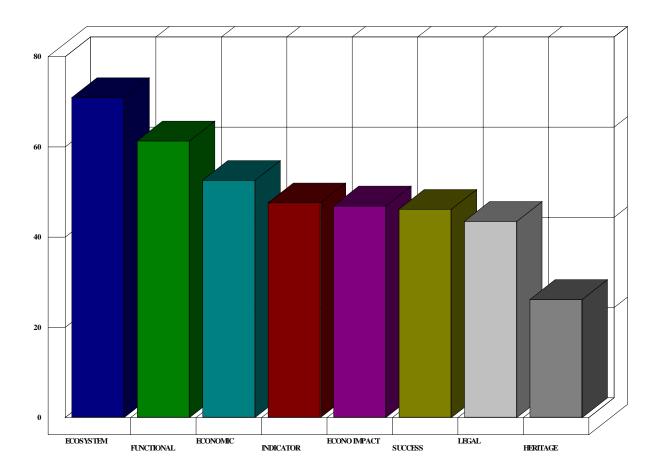
What are the factors that AZGFD should use to determine if a species needs special attention?

The participants defined, discussed, and combined their criteria into the following list which was voted using the CoNexus® dual-paired comparison software. The capital word in parentheses is the keyword used to identify the challenge on the CoNexus® graphs:

- Legal Constraints and Opportunities (LEGAL)
- Indicator Species bio community health (INDICATOR)
- Functional Species providing vital functions within ecosystems (FUNCTIONAL)
- **Economic Value -** providing significant economic value (ECONOMIC)
- Heritage Species (HERITAGE)
- Impact on the Ecosystem (ECOSYSTEM)
- Potential for Success (SUCCESS)
- Economic Impacts (ECONO IMPACT)

As shown in Figure P-11 (page P-13) the most important criteria were **impact on the ecosystem** and **functional species**. **Heritage species** was significantly less important, but its ranking may be due to a lack of understanding or confusion over the definition.

Figure P-11: Criteria Ranked by Importance



Group Discussion

- You have to look at the economic impact both good and bad. Are you going to bring a species back so it can wipe out the crops?
- Management difficulty how hard is it to protect a given species. Is it worth it? Is it costeffective?
- You have to have the money to do the proper research. You can't have numbers without research.
- What are the legal ramifications? How likely are you to have lawsuits filed by some group asking the courts to force you to do this or that?
- You should look at species that have some unique cultural or heritage meaning. Some species, bald eagles for example, have a special significance.
- The most important think is the species' overall impact on the eco-system. How does it fit in? What role does it have? If you wipe out a predator, does the prey take over?
- We have to look at a lot of different things. Sportsmen have to know that if we don't have a health ecosystem, we don't have a healthy sporting environment.